Hard-Wired Smoke Detector Information

Where the basement ceiling is exposed the following is required:

a. A hardwired/battery back-up alarm is required to be installed in the basement area.
b. A hardwired/battery back-up alarm is required to be installed on the first floor.
c. Both the basement and first floor alarms ARE required to be interconnected.
d. The second floor is required to have a battery operated smoke alarm.

   EXCEPTION: If the attic area is exposed (ceiling joist without flooring) then a hard-wired/battery operated smoke alarm is required to be installed. This alarm is NOT required to be interconnected with the other smoke alarms.
e. ALL sleeping rooms are to have battery operated smoke detectors.
f. A radio signal wireless system may be substituted for the second floor unit and all bedrooms to provide interconnection throughout the unit.
g. Building Permits are REQUIRED for this work. All work MUST be inspected by a Third Party City Electrical Inspector.

As Per the 2009 International Property Maintenance Code

Section 704.2

Single or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and in dwellings not regulated in Group R occupancies, regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.

2. In each room used for sleeping purposes.

3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level. Single or multiple-station smoke alarms shall be installed in other groups in accordance with the International Fire Code.

Section 704.3 Power source

In Group R occupancies and in dwellings not regulated as Group R occupancies, single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low.
Exception: Smoke alarms are permitted to be solely battery operated in buildings where no construction is taking place, buildings that are not served from a commercial power source and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

Section 704.4 Interconnection

Where more than one smoke alarm is required to be installed within an individual dwelling unit in Group R-2, R-3, R-4 and in dwellings not regulated as Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings which are not undergoing alterations, repairs, or construction of any kind.

2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

SMOKE ALARMS 10 YEARS OLD OR OLDER MUST BE REPLACED. SMOKE ALARMS MUST BE INSTALLED ACCORDING TO MANUFACTURER’S INSTRUCTIONS.